

***Simplicity***  
REG. U.S. PAT. OFF.

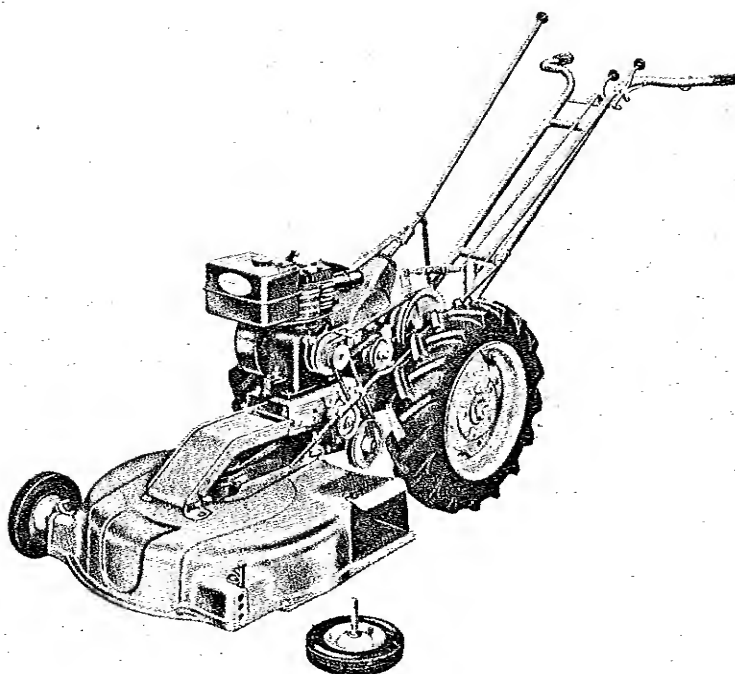
**INSTRUCTIONS  
AND PARTS LIST**

1962-1967

# 20" and 24" ROTARY LAWN MOWER

20" MOWER . . . ARTICLE 990019

24" MOWER . . . ARTICLE 990020



*Simplicity Manufacturing Company*

• PORT WASHINGTON, WISCONSIN

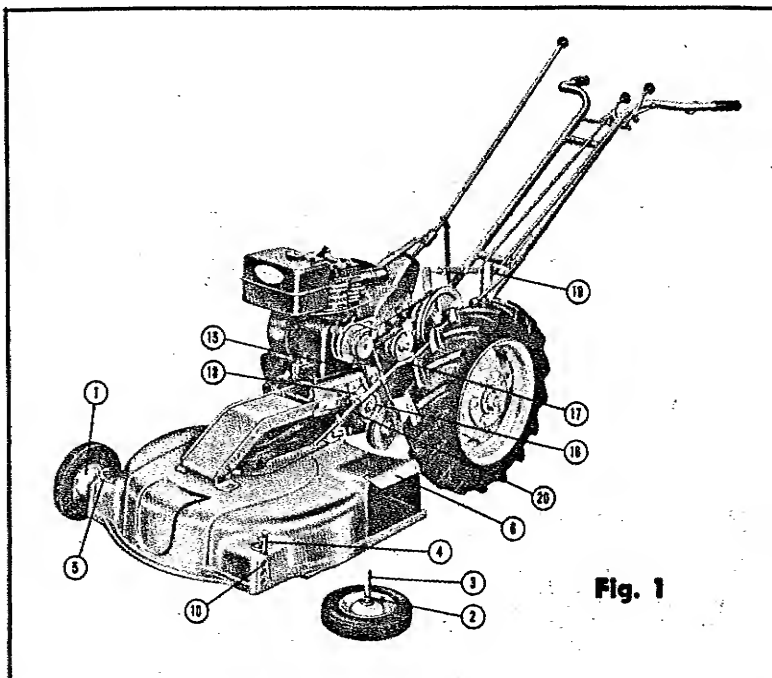


Fig. 1

## 20" AND 24" ROTARY LAWN MOWER ATTACHMENT

Be sure to read these instructions carefully. A thorough understanding of the rotary lawn mower will enable you to obtain many years of completely satisfactory service.

### PACKING LIST

The rotary lawn mower attachment is shipped complete in one carton.

### ASSEMBLING INSTRUCTIONS

1. The 20" and 24" rotary lawn mower attachments are completely assembled except for wheels and deflector.
2. Mount the two wheels as shown at (1). Notch (2) in wheel axle (3) must be positioned to allow lock pin (4) to enter casting hole. Lock pin is held in place by latch as shown at (5).
3. Bolt deflector (6) into position as shown.
4. Attach mower to Quick-Hitch in front of tractor as shown. See special Quick-Hitch instructions in tractor manual. (To simplify attaching mower lift up slightly on front end of mower and pull forward on tractor until mower hitch fits into slots of tractor Quick-Hitch.)

NOTE: Quick-Hitch (7, Fig. 2) is inserted in 1st and 3rd holes from back of push arm for tractors rated 5 H.P. and above, and in 2nd and 4th holes for lower powered tractors. Pivot pin (8) should be inserted in lower holes of drive bracket assembly (9) for tractors rated at 5 H.P. and above, and in upper holes for smaller model tractors.

### IMPORTANT

5. Height of housing should be adjusted on a flat hard surface, such as driveway or walk. Place front wheels in top hole (10). Loosen nuts (11, Fig. 2) and adjust housing height so that back of housing (12) is  $1\frac{3}{8}$ " to  $1\frac{1}{2}$ " above surface. Tighten nuts (11) securely so brackets will not slip in slot. This adjustment prevents scalping.

6. Adjust tension on arbor belt (13) by tightening nuts at (14). Avoid excessive tension. Springs should not be compressed all the way. Allow a slight flex in the belt.

### IMPORTANT

In order to obtain greater blade speed, the arbor belt should be placed on the smaller of the 2 arbor pulleys, when this mower is used with tractors rated at 5 HP and above.

NOTE: On 20" rotary mower there is one belt tightener rod assembly and two on the 24" mower as shown.

### IMPORTANT

When replacing cross drive or arbor belt (13) on 20" or 24" Rotary Lawn Mower, use a Super Combine V belt, Simplicity part No. 108059. Make sure that the knife blade turns clockwise.

7. Mount mower drive belt (15) over engine pulley and mower drive pulley as shown. Belt should run under idler pulley (16) as shown.
8. Attach lower idler rod (17) to idler lever assembly (18) and to lower clutch lever (19) using upper of two holes as shown.
9. Adjust belt tension on spring (20) with set collar. To avoid damaging belt, use minimum tension required to drive the blade.

### OPERATING INSTRUCTIONS

#### CAUTION

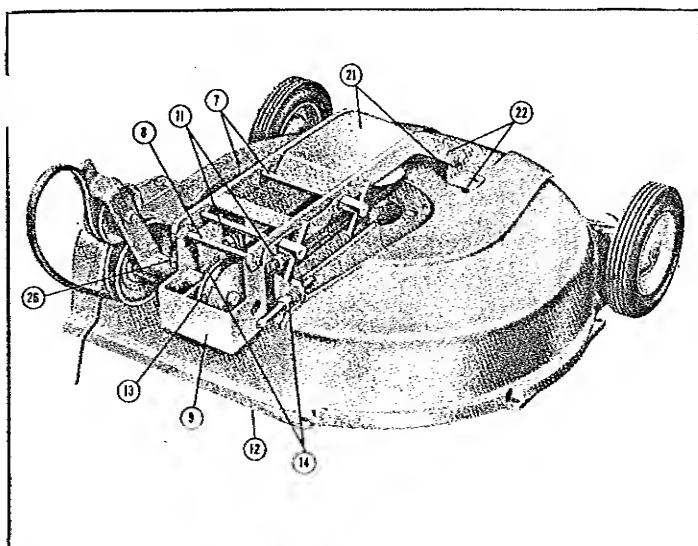
*Under no circumstances should any adjustments be made on the rotary mower with the engine running. Strict care should be used to keep hands and feet away from chute opening and from underneath housing when engine is running.*

The area to be mowed should be free from stones and rocks before operating the rotary lawn mower. Use tractor speed desirable. This will depend upon what is being cut and thickness of growth.

The mower performs best when the blade is sharp, and a better appearing lawn will result. It is always best to have a spare blade on hand, and sharpen blades as required.

### ADJUSTMENTS

When the rotary lawn mower is shipped, the push arm assembly (21) is assembled to the housing in the front



**Fig. 2**

holes as illustrated. Assemble push arm into holes at (22) when using rotary lawn mower with riding sulky. This changes the tractor handle height so it is more comfortable for the operator.

Adjustment for height of cut is provided at the front wheels. When shipped from the factory, blade is approximately 2" above the ground when front wheels are in top hole. This is the recommended setting for the average lawn. Higher cuts may be obtained by placing the front wheels in middle or bottom hole, such as around driveways or walks.

**NOTE:** The 2" factory setting of the blade results in an actual cut of less than 2" as the lift blade, standard equipment on both sizes of mower, sucks the grass up as it cuts. When mower passes, grass returns to its normal position.

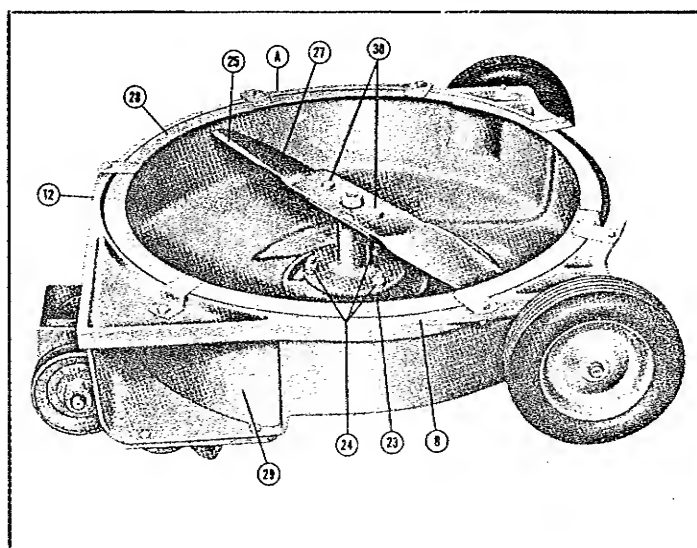
### OPTIONAL HEIGHT OF CUT ADJUSTMENT

Finer adjustments of cutting height may be obtained by removing one or several of the shims at (23, Fig. 3). To remove shims, loosen three nuts (24), remove shims from top of flange and place below flange, between flange and nuts, and tighten nuts securely. To check level of blade, measure distance from one end of blade (25) to bottom of housing at SIDE. Then swing blade around and make same measurement at other SIDE. Measure at points (A) and (B). If measurement is not the same at both sides, insert or remove shims until blade is level.

### LUBRICATION

The rotary lawn mower has one high pressure grease fitting and one oil plug. The grease fitting (26) should be greased every 4 to 6 hours of use. Apply grease pressure until grease comes out of both ends of housing. The oil plug is on the arbor housing. At the beginning and end of the mowing season, remove plug and lubricate with about 1 oz. of good quality SAE No. 30 oil. Replace plug. Tip mower on its back for about 5 minutes to permit oil to thoroughly lubricate upper arbor bearing. Then set mower in cutting position.

Frequently lubricate the idler pulley and front wheels with a few drops of oil.



**Fig. 3**

### LEAF MULCHER ATTACHMENT

Fig. 3 which illustrates 24" leaf mulcher, consists of 4 pieces, a special shorter mulching blade (27), mulching ring (28), baffle plate (29) and bracket for plate.

**NOTE:** On the 24" mower the mulching blade is 1" shorter than the grass cutting blade. On the 20" mower the mulching and grass cutting blades are the same. Remove mowing blade by loosening 2 nuts (30) and replace with mulching blade. Tighten nuts securely.

Bolt bracket to baffle plate (29, Fig. 3), leaving bolts a little loose for further adjustment. Install mulching ring and then tighten ring and baffle plate bolts. Be sure cap screw heads of ring are to the bottom of housing.

Side of baffle plate should touch sides of mower housing. If it doesn't, bend to conform. Rotate blade to see there is proper clearance with all parts.

### How to Order Repair Parts for Simplicity Garden Tractors and Attachments

The Authorized Simplicity dealer from whom you purchased your tractor and attachments can supply you with any replacement parts you may need. For prompt service, be sure to see your dealer first. He will furnish the correct parts from his stock or order them for you if necessary. However, you may mail-order directly from the factory.

To have your order filled correctly and for prompt service, please furnish the following information:

1. Model, number and year of purchase of tractor or attachment.
2. Part number, description, and quantity of part. (See parts list)

Be sure to include postage with your order. We do not pay transportation charges. Shipping weights are shown. Any excess will be promptly refunded.

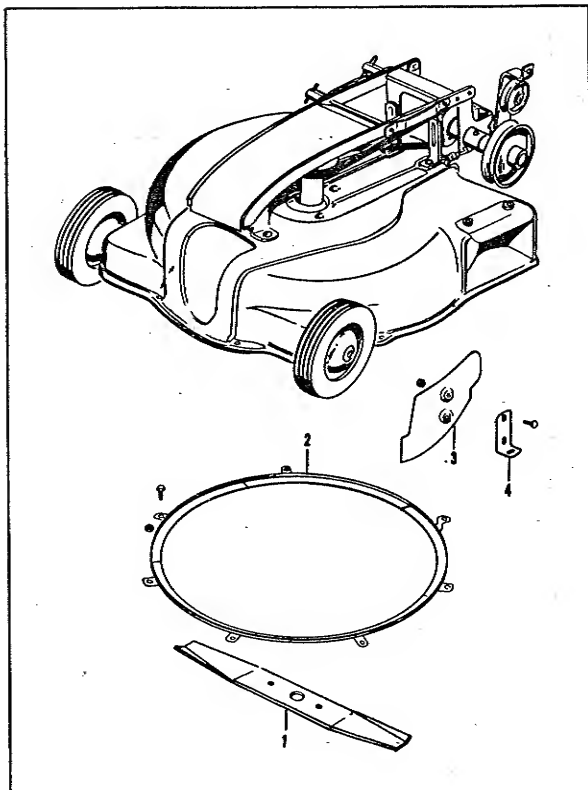
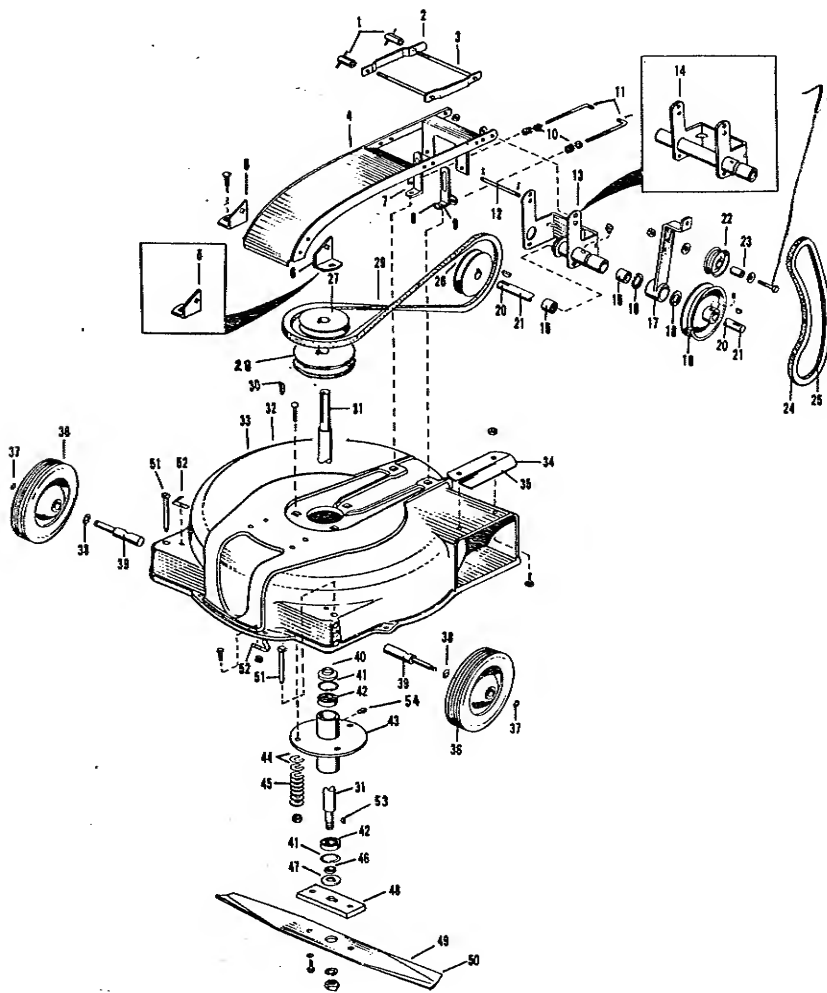
We reserve the right to change construction, specifications, prices and terms, without notice and without obligation as to tractors and attachments heretofore shipped.

PRICES SHOWN ARE U.S.A. PRICES. PRICES OUTSIDE OF U.S.A. SUBJECT TO LOCAL IMPORT DUTIES, TAXES, ETC.

# REPAIR PARTS

## 20" AND 24" ROTARY LAWN MOWERS

Order by Part Number



Item No.	Part No.	Description	Ship. Wt.	
			Lbs.	Oz.
1	8161041	T-Nut, Complete		4
2	103001	Hitch Side Plate		12
3	8162501	Hitch Clamp Assy.	1	
4	108002	Push Arm Assy.	8	8
5	108024	Bracket, R.H.		12
6	108023	Bracket, L.H. (24")		12
7	108018	Support Assy, R.H.	1	
8	108017	Support Assy, L.H.	1	
9	108015	Support (20")		6
10	8191047	Spring (20")		2
11	108034	Rod		4
12	108035	Pivot Pin		3
13	108016	Drive Bracket Assy. (24")	3	
14	108043	Drive Bracket Assy. (20")	4	
15	108054	Bearing, Needle		3
16	8151063	Retaining Ring		2
17	108032	Idler Lever Assy.	1	6
18	116001	Washer		4
19	108026	Pulley	1	10
20	108014	Shaft, Idler (24")	1	2
21	108045	Shaft, Idler (20")		
22	8051505	Idler Pulley Assy.		12
23	8171073	Inner Bearing Race		4
24	8161119	"V" Belt 33" (Drive) (24" Mower)		12
25	8161164	"V" Belt 31" (Drive) (20" Mower)		12
26	108025	Pulley	2	
27	108056	Pulley	1	8
28	108025	Pulley	2	
29	10805937	A35S Super Combine Cross Drive Belt		14
30	8221042	Key		3
31	108008	Arbor	1	8
32	108001	Housing (24")	30	
33	108048	Housing (20")	25	
34	108060	Deflector (24")		8
35	108061	Deflector (20")		8
36	108049	Wheel w/tire	4	
37	108053	Ring, Retaining		2
38	108058	Washer, Spring Tension		1
39	108036	Axle		8
40	108038	Shield		2
41	108051	Retaining Ring		2
42	108052	Ball Bearing		4
43	108010	Arbor Housing Assy.	4	
44	108077	Shim, .032 thick		1
45	108076	Shim, .0625 thick		1
46	108033	Spacer		2
47	108040	Washer, Arbor		2
48	8131007	Arbor Flange	1	8
49	108004	Knife Blade (24")	4	
50	108042	Knife Blade (20")	3	8
51	108037	Pin, Lock		4
52	108039	Latch		1
53	725001	Key		
54	726002	Pipe Plug, 1/8" Std. 1641 Alemite Grease Fitting	2	1

### LEAF MULCHER FOR 20" ROTARY LAWN MOWER

1	108042	Knife Blade, 20" only	3	8
2	108066	Ring Assembly, 20" only	3	8
3	108070	Plate, Baffle, 20" only	1	12
4	108071	Bracket		4

### LEAF MULCHER FOR 24" ROTARY LAWN MOWER

1	108069	Knife Blade, 24" only	4	
2	108062	Ring Assembly, 24" only	4	
3	108073	Plate, Baffle, 24" only	2	
4	108071	Bracket		4

Obsolete 1961/62 + before